

Journal of Power Sources 138 (2004) 365-369



www.elsevier.com/locate/jpowsour

Subject Index of Volume 138

Activated carbon

Steam activation; BET surface area; Mesopores; Surpercapacitor (Wu, F.-C. (138) 351)

Activation

SOFC; Ohmic; Concentration; Polarization; Performance fuel cell (Hernández-Pacheco, E. (138) 174)

Air impurities

PEM fuel cell; Cyclic voltammetry (Mohtadi, R. (138) 216)

 Al_2O_3

LiCoVO₄; Surface modification; Li-ion batteries. (Landschoot, N.V. (138) 262)

Aluminum electrode

Zinc; Aluminum-air battery (Tang, Y. (138) 313)

Aluminum oxide

Electrolytic capacitor; Anodization; Hydration; TEM analysis (Chang, J.-K. (138) 301)

Aluminum-air battery

Zinc; Aluminum electrode (Tang, Y. (138) 313)

Amide

Hydrogen storage; Solid–gas reaction; Magnesium; Lithium; Imide (Nakamori, Y. (138) 309)

Anode-supported

Intermediate temperature; Direct internal reforming; SOFC; Planar; Dynamic model (Aguiar, P. (138) 120)

Anodization

Electrolytic capacitor; Aluminum oxide; Hydration; TEM analysis (Chang, J.-K. (138) 301)

Auto thermal reforming

Hydrogen economy; Hydrogen production; Fuel processing; Fuel cell; Water recovery (Biesheuvel, P.M. (138) 156)

Batteries

NiMH; Equalizer (Hande, A. (138) 327)

Battery behavior

Lithium insertion; Comparison (Minakshi, M. (138) 319)

Batter

Supercapacitor; Combination; High-pulse power (Choi, S.H. (138) 360) Bend loss coefficients

PEM fuel cell; Serpentine channels; Laminar flow; Computational fluid dynamics; Design correlations (Maharudrayya, S. (138) 1)

BET surface area

Activated carbon; Steam activation; Mesopores; Surpercapacitor (Wu, F.-C. (138) 351)

Binder

Graphite anode; Solid electrolyte interface; Self-delithiation; Li-ion battery (Zhang, S.S. (138) 226)

Biomass gasification

Molten carbonate fuel cell (MCFC); Gas turbine; Power generation system (Morita, H. (138) 31)

Bipolar plate

Nitridation; Stainless steel; Ferrite; PEMFC (Wang, H. (138) 79)

Bipolar plate

Thermal nitridation; Ni-based alloy; Stainless steel; PEMFC; Corrosion (Wang, H. (138) 86)

Carbon black support

PEFC electrode; Graft polymerization; Monomer solution; Polymer electrolyte fuel cell; Tafel plots (Mizuhata, H. (138) 25)

Carbor

Nanotube; Lithium battery (Morris, R.S. (138) 277)

Catalyst laver

Fuel cell; Modeling; Particle size; Catalyst utilization; Polarization (Farhat, Z.N. (138) 68)

Catalyst utilization

Fuel cell; Catalyst layer; Modeling; Particle size; Polarization (Farhat, Z.N. (138) 68)

Cathode structure

PEMFC; Planar design; Free-breathing; Liquid water saturation (Hottinen, T. (138) 205)

CFD

PEM fuel cells; Fuel cell modeling; Reformate (Zhou, T. (138) 101)

Coatings

Solid oxide fuel cells; Interconnects; Electron microscopy; X-ray diffraction (Qu, W. (138) 162)

Colloidal silica

Nanocomposite polymer electrolyte; Poly(ethylene glycol) diacrylate; Lithium polymer batteries; Nanosize SiO₂ (Qiu, W.-l. (138) 245)

Combination

Battery; Supercapacitor; High-pulse power (Choi, S.H. (138) 360)

Combustion CVD

Solid oxide fuel cells; Nanostructured electrodes; Functionally graded materials (Liu, Y. (138) 194)

Comparison

Lithium insertion; Battery behavior (Minakshi, M. (138) 319)

Composite materials

Sulfur cathode; Rechargeable lithium batteries; Cycle performance; Material utilization efficiency (Wang, J. (138) 271)

Compressive metallic seals

Solid oxide fuel cells; Mica; Mechanical properties; Leakage rate; Stack testing (Bram, M. (138) 111)

Computational fluid dynamics

PEM fuel cell; Serpentine channels; Laminar flow; Bend loss coefficients; Design correlations (Maharudrayya, S. (138) 1)

Concentration

SOFC; Ohmic; Activation; Polarization; Performance fuel cell (Hernández-Pacheco, E. (138) 174)

Corrosion

Thermal nitridation; Ni-based alloy; Stainless steel; PEMFC; Bipolar plate (Wang, H. (138) 86)

"Coup de fouet"

Lead-acid batteries; Reactivation peak; State-of-charge; State-of-health; Grid corrosion (de Oliveira, C.P. (138) 294)

Cyano group

Ionic liquid; Lithium battery (Egashira, M. (138) 240)

Cycle durability

Ionic liquid; Lithium ion cell; Safety; Solid electrolyte interface (Sato, T. (138) 253) Cycle performance

Sulfur cathode; Composite materials; Rechargeable lithium batteries; Material utilization efficiency (Wang, J. (138) 271)

Cyclic voltammetry

Fuel cell; Pulse electrodeposition; Off time (Kim, H. (138) 14)

Cyclic voltammetry

PEM fuel cell; Air impurities (Mohtadi, R. (138) 216)

Dehydration

Polymer electrolyte fuel cell stack; Water management; Flooding (Eckl, R. (138) 137)

Design correlations

PEM fuel cell; Serpentine channels; Laminar flow; Bend loss coefficients; Computational fluid dynamics (Maharudrayya, S. (138) 1)

Direct internal reforming

Anode-supported; Intermediate temperature; SOFC; Planar; Dynamic model (Aguiar, P. (138) 120)

Dopant

Lithium rechargeable battery; LiCoO₂ cathode active material; Sol–gel method; Magnesuim; Zirconium (Kim, H.-S. (138) 232)

Double-layer capacitor

Non-aqueous solvent; Electrolyte; Phase diagram; Electrolytic conductivity; Electrochemical stability (Ding, M.S. (138) 340)

Dynamic model

Anode-supported; Intermediate temperature; Direct internal reforming; SOFC; Planar (Aguiar, P. (138) 120)

Dynamic model

Fuel cell; PEM fuel cell; Electrochemical model (El-Sharkh, M.Y. (138) 199)

Electrochemical impedance spectroscopy

Thermal batteries; Li-based molten salt batteries (Singh, P. (138) 323) Electrochemical model

Fuel cell; PEM fuel cell; Dynamic model (El-Sharkh, M.Y. (138) 199) Electrochemical stability

Non-aqueous solvent; Electrolyte; Double-layer capacitor; Phase diagram; Electrolytic conductivity (Ding, M.S. (138) 340)

Electrochemical

Warpage; Glassy seals; Leakage; Hydrogen (Li, W. (138) 145)

Electrode flooding

PEM fuel cells; Water management; Sequential exhausting (Knobbe, M.W. (138) 94)

Electrolyte

Non-aqueous solvent; Double-layer capacitor; Phase diagram; Electrolytic conductivity; Electrochemical stability (Ding, M.S. (138) 340) Electrolytes

Non-flammable; Lithium batteries (Dixon, B.G. (138) 274)

Electrolytic capacitor

Aluminum oxide; Anodization; Hydration; TEM analysis (Chang, J.-K. (138) 301)

Electrolytic conductivity

Non-aqueous solvent; Electrolyte; Double-layer capacitor; Phase diagram; Electrochemical stability (Ding, M.S. (138) 340)

Electron microscopy

Solid oxide fuel cells; Interconnects; Coatings; X-ray diffraction (Qu, W. (138) 162)

Equalizer

NiMH; Batteries (Hande, A. (138) 327)

Ethanol reforming

Hydrogen production; Fuel cell (Comas, J. (138) 61)

Ferrite

Nitridation; Stainless steel; PEMFC; Bipolar plate (Wang, H. (138) 79) Flooding

Polymer electrolyte fuel cell stack; Water management; Dehydration (Eckl, R. (138) 137)

Free-breathing

PEMFC; Planar design; Cathode structure; Liquid water saturation (Hottinen, T. (138) 205)

Fuel cell modeling

PEM fuel cells; Reformate; CFD (Zhou, T. (138) 101)

Fuel cell

Catalyst layer; Modeling; Particle size; Catalyst utilization; Polarization (Farhat, Z.N. (138) 68)

Fuel cell

Ethanol reforming; Hydrogen production (Comas, J. (138) 61)

Fuel cell

Hydrogen economy; Hydrogen production; Fuel processing; Auto thermal reforming; Water recovery (Biesheuvel, P.M. (138) 156)

Fuel cell

PEM fuel cell; Electrochemical model; Dynamic model (El-Sharkh, M.Y. (138) 199)

Fuel cell

PEM; Micro-fuel cell (Li, J. (138) 211)

Fuel cell

PEMFC; Gas diffusion layer; Mass transfer (Jeng, K.T. (138) 41)

Fuel cell

Pulse electrodeposition; Off time; Cyclic voltammetry (Kim, H. (138) 14)

Fuel processing

Hydrogen economy; Hydrogen production; Fuel cell; Auto thermal reforming; Water recovery (Biesheuvel, P.M. (138) 156)

Fuel-cells

Geometric design; Graphical user interface; Voxel-based sculpturing (Smirnov, A.V. (138) 187)

Functionally graded materials

Solid oxide fuel cells; Combustion CVD; Nanostructured electrodes (Liu, Y. (138) 194)

Gas diffusion layer

PEMFC; Fuel cell; Mass transfer (Jeng, K.T. (138) 41)

Gas turbine

Biomass gasification; Molten carbonate fuel cell (MCFC); Power generation system (Morita, H. (138) 31)

Geometric design

Fuel-cells; Graphical user interface; Voxel-based sculpturing (Smirnov, A.V. (138) 187)

Glassy seals

Warpage; Leakage; Electrochemical; Hydrogen (Li, W. (138) 145)

Graft polymerization

PEFC electrode; Carbon black support; Monomer solution; Polymer electrolyte fuel cell; Tafel plots (Mizuhata, H. (138) 25)

Graphical user interface

Fuel-cells; Geometric design; Voxel-based sculpturing (Smirnov, A.V. (138) 187)

Graphite anode

Binder; Solid electrolyte interface; Self-delithiation; Li-ion battery (Zhang, S.S. (138) 226)

Grid corrosion

Lead-acid batteries; "Coup de fouet"; Reactivation peak; State-ofcharge; State-of-health (de Oliveira, C.P. (138) 294)

High-pulse power

Battery; Supercapacitor; Combination (Choi, S.H. (138) 360)

Hydration

Electrolytic capacitor; Aluminum oxide; Anodization; TEM analysis (Chang, J.-K. (138) 301)

Hydrogen economy

Hydrogen production; Fuel processing; Fuel cell; Auto thermal reforming; Water recovery (Biesheuvel, P.M. (138) 156)

Hydrogen production

Ethanol reforming; Fuel cell (Comas, J. (138) 61)

Hydrogen production

Hydrogen economy; Fuel processing; Fuel cell; Auto thermal reforming; Water recovery (Biesheuvel, P.M. (138) 156)

Hydrogen storage

Solid–gas reaction; Magnesium; Lithium; Amide; Imide (Nakamori, Y. (138) 309)

Hydrogen

Warpage; Glassy seals; Leakage; Electrochemical (Li, W. (138) 145)

Imide

Hydrogen storage; Solid-gas reaction; Magnesium; Lithium; Amide (Nakamori, Y. (138) 309)

Interconnects

Solid oxide fuel cells; Coatings; Electron microscopy; X-ray diffraction (Qu, W. (138) 162)

Intermediate temperature

Anode-supported; Direct internal reforming; SOFC; Planar; Dynamic model (Aguiar, P. (138) 120)

Ionic liquid

Lithium battery; Cyano group (Egashira, M. (138) 240)

Ionic liquid

Lithium ion cell; Safety; Cycle durability; Solid electrolyte interface (Sato, T. (138) 253)

Laminar flow

PEM fuel cell; Serpentine channels; Bend loss coefficients; Computational fluid dynamics; Design correlations (Maharudrayya, S. (138) 1)

Lead-acid batteries

"Coup de fouet"; Reactivation peak; State-of-charge; State-of-health; Grid corrosion (de Oliveira, C.P. (138) 294)

Leakage rate

Solid oxide fuel cells; Compressive metallic seals; Mica; Mechanical properties; Stack testing (Bram, M. (138) 111)

Leakage

Warpage; Glassy seals; Electrochemical; Hydrogen (Li, W. (138) 145) Li-based molten salt batteries

Thermal batteries; Electrochemical impedance spectroscopy (Singh, P. (138) 323)

Li-ion batteries.

 $\mbox{LiCoVO}_4;$ Surface modification; $\mbox{Al}_2\mbox{O}_3$ (Landschoot, N.V. (138) 262) Li-ion battery

Binder; Graphite anode; Solid electrolyte interface; Self-delithiation (Zhang, S.S. (138) 226)

Li-ion battery

Lithium cobalt oxide; Self-discharge (Choi, S.H. (138) 283)

Li-ior

Military; LiNiO₂ positive; Low temperatures (Fan, J. (138) 288)

LiCoO2 cathode active material

Lithium rechargeable battery; Sol-gel method; Dopant; Magnesuim; Zirconium (Kim, H.-S. (138) 232)

LiCoVO₄

Surface modification; Al_2O_3 ; Li-ion batteries. (Landschoot, N.V. (138) 262)

LiNiO₂ positive

Li-ion; Military; Low temperatures (Fan, J. (138) 288)

Liquid water saturation

PEMFC; Planar design; Free-breathing; Cathode structure (Hottinen, T. (138) 205)

Lithium batteries

Non-flammable; Electrolytes (Dixon, B.G. (138) 274)

Lithium battery

Ionic liquid; Cyano group (Egashira, M. (138) 240)

Lithium battery

Nanotube; Carbon (Morris, R.S. (138) 277)

Lithium cobalt oxide

Li-ion battery; Self-discharge (Choi, S.H. (138) 283)

Lithium insertion

Battery behavior; Comparison (Minakshi, M. (138) 319)

Lithium ion cell

Ionic liquid; Safety; Cycle durability; Solid electrolyte interface (Sato, T. (138) 253)

Lithium polymer batteries

Nanocomposite polymer electrolyte; Poly(ethylene glycol) diacrylate; Colloidal silica; Nanosize SiO₂ (Qiu, W.-l. (138) 245)

Lithium rechargeable battery

LiCoO₂ cathode active material; Sol–gel method; Dopant; Magnesuim; Zirconium (Kim, H.-S. (138) 232)

Lithium

Hydrogen storage; Solid-gas reaction; Magnesium; Amide; Imide (Nakamori, Y. (138) 309)

Low temperatures

Li-ion; Military; LiNiO₂ positive (Fan, J. (138) 288)

Magnesium

Hydrogen storage; Solid–gas reaction; Lithium; Amide; Imide (Nakamori, Y. (138) 309)

Magnesuim

Lithium rechargeable battery; LiCoO₂ cathode active material; Sol–gel method; Dopant; Zirconium (Kim, H.-S. (138) 232)

Mass transfer

PEMFC; Fuel cell; Gas diffusion layer (Jeng, K.T. (138) 41)

Material utilization efficiency

Sulfur cathode; Composite materials; Rechargeable lithium batteries; Cycle performance (Wang, J. (138) 271)

Mechanical properties

Solid oxide fuel cells; Compressive metallic seals; Mica; Leakage rate; Stack testing (Bram, M. (138) 111)

Membrane electrode assembly

Phosphosilicate; Polyimide (Nakamoto, N. (138) 51)

Mesopore

Activated carbon; Steam activation; BET surface area; Surpercapacitor (Wu, F.-C. (138) 351)

Mica

Solid oxide fuel cells; Compressive metallic seals; Mechanical properties; Leakage rate; Stack testing (Bram, M. (138) 111)

Micro-fuel cell

Fuel cell; PEM (Li, J. (138) 211)

Military

Li-ion; LiNiO₂ positive; Low temperatures (Fan, J. (138) 288)

Modeling

Fuel cell; Catalyst layer; Particle size; Catalyst utilization; Polarization (Farhat, Z.N. (138) 68)

Molten carbonate fuel cell (MCFC)

Biomass gasification; Gas turbine; Power generation system (Morita, H. $(138)\ 31)$

Monomer solution

PEFC electrode; Carbon black support; Graft polymerization; Polymer electrolyte fuel cell; Tafel plots (Mizuhata, H. (138) 25)

Nanocomposite polymer electrolyte

Poly(ethylene glycol) diacrylate; Lithium polymer batteries; Colloidal silica; Nanosize SiO₂ (Qiu, W.-l. (138) 245)

Nanosize SiO₂

Nanocomposite polymer electrolyte; Poly(ethylene glycol) diacrylate; Lithium polymer batteries; Colloidal silica (Qiu, W.-l. (138) 245) Nanostructured electrodes

Solid oxide fuel cells; Combustion CVD; Functionally graded materials (Liu, Y. (138) 194)

Nanotube

Lithium battery; Carbon (Morris, R.S. (138) 277)

Ni-based alloy

Thermal nitridation; Stainless steel; PEMFC; Bipolar plate; Corrosion (Wang, H. (138) 86)

NiMH

Batteries; Equalizer (Hande, A. (138) 327)

Nitridation

Stainless steel; Ferrite; PEMFC; Bipolar plate (Wang, H. (138) 79)

Non-aqueous solvent

Electrolyte; Double-layer capacitor; Phase diagram; Electrolytic conductivity; Electrochemical stability (Ding, M.S. (138) 340)

Non-flammable

Electrolytes; Lithium batteries (Dixon, B.G. (138) 274)

Off time

Fuel cell; Pulse electrodeposition; Cyclic voltammetry (Kim, H. (138) 14)

Ohmic

SOFC; Activation; Concentration; Polarization; Performance fuel cell (Hernández-Pacheco, E. (138) 174)

Oxygen reduction

Platinum-cobalt alloy; Polymer electrolyte fuel cells (Salgado, J.R.C. (138) 56)

Particle size

Fuel cell; Catalyst layer; Modeling; Catalyst utilization; Polarization (Farhat, Z.N. (138) 68)

PEFC electrode

Carbon black support; Graft polymerization; Monomer solution; Polymer electrolyte fuel cell; Tafel plots (Mizuhata, H. (138) 25)

PEM fuel cell

Air impurities; Cyclic voltammetry (Mohtadi, R. (138) 216)

PEM fuel cell

Fuel cell; Electrochemical model; Dynamic model (El-Sharkh, M.Y. (138) 199)

PEM fuel cell

Serpentine channels; Laminar flow; Bend loss coefficients; Computational fluid dynamics; Design correlations (Maharudrayya, S. (138)

PEM fuel cells

Fuel cell modeling; Reformate; CFD (Zhou, T. (138) 101)

PEM fuel cells

Water management; Electrode flooding; Sequential exhausting (Knobbe, M.W. (138) 94)

PEM

Fuel cell; Micro-fuel cell (Li, J. (138) 211)

PEMFO

Fuel cell; Gas diffusion layer; Mass transfer (Jeng, K.T. (138) 41)

PEMFC

Nitridation; Stainless steel; Ferrite; Bipolar plate (Wang, H. (138) 79) PEMFC

Planar design; Free-breathing; Cathode structure; Liquid water saturation (Hottinen, T. (138) 205)

PEMFO

Thermal nitridation; Ni-based alloy; Stainless steel; Bipolar plate; Corrosion (Wang, H. (138) 86)

Performance fuel cell

SOFC; Ohmic; Activation; Concentration; Polarization (Hernández-Pacheco, E. (138) 174)

Phase diagram

Non-aqueous solvent; Electrolyte; Double-layer capacitor; Electrolytic conductivity; Electrochemical stability (Ding, M.S. (138) 340)

Phosphosilicate

Membrane electrode assembly; Polyimide (Nakamoto, N. (138) 51)

PEMFC; Free-breathing; Cathode structure; Liquid water saturation (Hottinen, T. (138) 205)

Planar

Anode-supported; Intermediate temperature; Direct internal reforming; SOFC; Dynamic model (Aguiar, P. (138) 120)

Platinum-cobalt alloy

Oxygen reduction; Polymer electrolyte fuel cells (Salgado, J.R.C. (138) 56)

Polarization

Fuel cell; Catalyst layer; Modeling; Particle size; Catalyst utilization (Farhat, Z.N. (138) 68)

Polarization

SOFC; Ohmic; Activation; Concentration; Performance fuel cell (Hernández-Pacheco, E. (138) 174)

Poly(ethylene glycol) diacrylate

Nanocomposite polymer electrolyte; Lithium polymer batteries; Colloidal silica; Nanosize SiO₂ (Qiu, W.-l. (138) 245)

Polyimid

Phosphosilicate; Membrane electrode assembly (Nakamoto, N. (138) 51)

Polymer electrolyte fuel cell stack

Water management; Dehydration; Flooding (Eckl, R. (138) 137)

Polymer electrolyte fuel cell

PEFC electrode; Carbon black support; Graft polymerization; Monomer solution; Tafel plots (Mizuhata, H. (138) 25)

Polymer electrolyte fuel cells

Platinum-cobalt alloy; Oxygen reduction (Salgado, J.R.C. (138) 56)

Power generation system

Biomass gasification; Molten carbonate fuel cell (MCFC); Gas turbine (Morita, H. (138) 31)

Pulse electrodeposition

Fuel cell; Off time; Cyclic voltammetry (Kim, H. (138) 14)

Reactivation peak

Lead-acid batteries; "Coup de fouet"; State-of-charge; State-of-health; Grid corrosion (de Oliveira, C.P. (138) 294)

Rechargeable lithium batteries

Sulfur cathode; Composite materials; Cycle performance; Material utilization efficiency (Wang, J. (138) 271)

Reformate

PEM fuel cells; Fuel cell modeling; CFD (Zhou, T. (138) 101)

Safety

Ionic liquid; Lithium ion cell; Cycle durability; Solid electrolyte interface (Sato, T. (138) 253)

Self-delithiation

Binder; Graphite anode; Solid electrolyte interface; Li-ion battery (Zhang, S.S. (138) 226)

Self-discharge

Lithium cobalt oxide; Li-ion battery (Choi, S.H. (138) 283)

Sequential exhausting

PEM fuel cells; Water management; Electrode flooding (Knobbe, M.W. (138) 94)

Serpentine channels

PEM fuel cell; Laminar flow; Bend loss coefficients; Computational fluid dynamics; Design correlations (Maharudrayya, S. (138) 1)

SOFC

Anode-supported; Intermediate temperature; Direct internal reforming; Planar; Dynamic model (Aguiar, P. (138) 120)

SOFC

Ohmic; Activation; Concentration; Polarization; Performance fuel cell (Hernández-Pacheco, E. (138) 174)

Sol-gel method

Lithium rechargeable battery; LiCoO₂ cathode active material; Dopant; Magnesuim; Zirconium (Kim, H.-S. (138) 232)

Solid electrolyte interface

Binder; Graphite anode; Self-delithiation; Li-ion battery (Zhang, S.S. (138) 226)

Solid electrolyte interface

Ionic liquid; Lithium ion cell; Safety; Cycle durability (Sato, T. (138) 253)

Solid oxide fuel cells

Combustion CVD; Nanostructured electrodes; Functionally graded materials (Liu, Y. (138) 194)

Solid oxide fuel cells

Compressive metallic seals; Mica; Mechanical properties; Leakage rate; Stack testing (Bram, M. (138) 111)

Solid oxide fuel cells

Interconnects; Coatings; Electron microscopy; X-ray diffraction (Qu, W. (138) 162)

Solid-gas reaction

Hydrogen storage; Magnesium; Lithium; Amide; Imide (Nakamori, Y. (138) 309)

Stack testing

Solid oxide fuel cells; Compressive metallic seals; Mica; Mechanical properties; Leakage rate (Bram, M. (138) 111)

Stainless steel

Nitridation; Ferrite; PEMFC; Bipolar plate (Wang, H. (138) 79)

Stainless steel

Thermal nitridation; Ni-based alloy; PEMFC; Bipolar plate; Corrosion (Wang, H. (138) 86)

State-of-charge

Lead-acid batteries; "Coup de fouet"; Reactivation peak; State-of-health; Grid corrosion (de Oliveira, C.P. (138) 294)

State-of-health

Lead-acid batteries; "Coup de fouet"; Reactivation peak; State-of-charge; Grid corrosion (de Oliveira, C.P. (138) 294)

Steam activation

Activated carbon; BET surface area; Mesopores; Surpercapacitor (Wu, F.-C. (138) 351)

Sulfur cathode

Composite materials; Rechargeable lithium batteries; Cycle performance; Material utilization efficiency (Wang, J. (138) 271)

Supercapacitor

Battery; Combination; High-pulse power (Choi, S.H. (138) 360)

Surface modification

 $LiCoVO_4$; Al_2O_3 ; Li-ion batteries. (Landschoot, N.V. (138) 262) Surpercapacitor

Activated carbon; Steam activation; BET surface area; Mesopores (Wu, F.-C. (138) 351)

Tafel plots

PEFC electrode; Carbon black support; Graft polymerization; Monomer solution; Polymer electrolyte fuel cell (Mizuhata, H. (138) 25)

TEM analysis

Electrolytic capacitor; Aluminum oxide; Anodization; Hydration (Chang, J.-K. (138) 301)

Thermal batteries

Li-based molten salt batteries; Electrochemical impedance spectroscopy (Singh, P. (138) 323)

Thermal nitridation

Ni-based alloy; Stainless steel; PEMFC; Bipolar plate; Corrosion (Wang, H. (138) 86)

Voxel-based sculpturing

Fuel-cells; Geometric design; Graphical user interface (Smirnov, A.V. (138) 187)

Warpage

Glassy seals; Leakage; Electrochemical; Hydrogen (Li, W. (138) 145)

Water management

PEM fuel cells; Electrode flooding; Sequential exhausting (Knobbe, M.W. (138) 94)

Water management

Polymer electrolyte fuel cell stack; Dehydration; Flooding (Eckl, R. (138) 137)

Water recovery

Hydrogen economy; Hydrogen production; Fuel processing; Fuel cell; Auto thermal reforming (Biesheuvel, P.M. (138) 156)

X-ray diffraction

Solid oxide fuel cells; Interconnects; Coatings; Electron microscopy (Qu, W. (138) 162)

Zinc

Aluminum electrode; Aluminum-air battery (Tang, Y. (138) 313) Zirconium

Lithium rechargeable battery; LiCoO₂ cathode active material; Sol–gel method; Dopant; Magnesuim (Kim, H.-S. (138) 232)